

# Notice of Allowability

Application No.

10/697,186

Examiner

Yaima Campos

Applicant(s)

MELAMENT ET AL.

Art Unit

2185

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to 1/17/07.
2. ☒ The allowed claim(s) is/are 1-3, 5-9 and 11-14.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All b) ☐ Some\* c) ☐ None of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
  5. ☐ CORRECTED DRAWINGS (as "replacement sheets") must be submitted.
    - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review (PTO-948) attached:
      - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
    - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.
- Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

## Attachment(s)

1. ☐ Notice of References Cited (PTO-892)
2. ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3. ☐ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date \_\_\_\_\_
4. ☐ Examiner's Comment Regarding Requirement for Deposit of Biological Material
5. ☐ Notice of Informal Patent Application
6. ☐ Interview Summary (PTO-413), Paper No./Mail Date \_\_\_\_\_
7. ☒ Examiner's Amendment/Comment
8. ☐ Examiner's Statement of Reasons for Allowance
9. ☐ Other \_\_\_\_\_

## DETAILED ACTION

### **I. EXAMINER'S AMENDMENT**

1. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

2. Authorization for this examiner's amendment was given in a telephone interview with Patent Attorney Yoav Alkalay in representation of Suzanne Erez (Reg. No. 46,688) on January 24, 2007.

3. The following amendment is done to incorporate subject matter of allowable claim 10 within independent claims 1, 6, 13 and 14 and place Application 10/697,186 in condition for allowance.

4. The application has been amended as follows:

5. **Claim 1**

A method of storage management, the method comprising:  
storing data on a high reliability high performance storage medium;  
backing up said data on a high reliability low performance storage medium; and  
after said backing up, copying at least some of said data from said high reliability high performance storage medium to a low reliability high performance storage medium and  
freeing space occupied thereby on the high reliability high performance storage medium,  
wherein the terms "high" and "low" performance or reliability involve a separation of  
at least one order of magnitude in performance or magnitude, respectively

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wherein said high reliability high performance storage medium is configured to have a mean time between failure which is at least ten times higher than a mean time between failure which said low reliability high performance storage medium is configured to have.

6. Claim 6

A system for storing computer-readable media, said system comprising:

a high performance high reliability storage medium configured for initial storage of data;  
a low performance high reliability storage medium configured for backup of data initially stored on said high performance high reliability storage medium; and  
a high performance low reliability storage medium, configured to receive data transferred from said high performance high reliability storage medium, after said data has been backed up on said low performance high reliability storage medium, wherein the terms "high" and "low" performance or reliability involve a separation of at least one order of magnitude in performance or magnitude, respectively

wherein said high reliability high performance storage medium is configured to have a mean time between failure which is at least ten times higher than a mean time between failure which said low reliability high performance storage medium is configured to have.

7. Claim 13

A program storage device readable by machine, tangibly embodying a program of instructions executable by the machine to perform method steps of storage management comprising:

storing data on a high reliability high performance storage medium;

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backing up said data on a high reliability low performance storage medium; and  
after said backing up, copying at least some of said data from said high reliability high  
performance storage medium to a low reliability high performance storage medium and  
freeing space occupied thereby on the high reliability high performance storage medium,  
wherein the terms "high" and "low" performance or reliability involve a separation of at  
least one order of magnitude in performance or magnitude, respectively

**wherein said high reliability high performance storage medium is configured to  
have a mean time between failure which is at least ten times higher than a mean  
time between failure which said low reliability high performance storage medium is  
configured to have.**

8. **Claim 14**

A computer program product comprising a computer useable medium having computer  
readable program code embodied therein of storage management the computer program  
product comprising:

computer readable program code for causing the computer to store data on a high  
reliability high performance storage medium;  
computer readable program code for causing the computer to back up said data on a high  
reliability low performance storage medium; and  
computer readable program code for causing the computer after said backing up, to copy  
at least some of said data from said high reliability high performance storage medium to a  
low reliability high performance storage medium and free space occupied thereby on the  
high reliability high performance storage medium, wherein the terms "high" and "low"

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performance or reliability involve a separation of at least one order of magnitude in performance or magnitude, respectively

wherein said high reliability high performance storage medium is configured to have a mean time between failure which is at least ten times higher than a mean time between failure which said low reliability high performance storage medium is configured to have.

9. Claim 10 is cancelled.

## II. ALLOWANCE

10. The following is an examiner's statement of reasons for allowance:

### *(a) Cancelled Claims*

- 11. Claims 4 and 10 have been cancelled
- 12. Claim 4 has been cancelled by amendment dated August 14, 2006.
- 13. Claim 10 is cancelled by Examiner's amendment above.

### *(b) Claims Allowed*

14. Per the instant office action, claims 1-3, 5-9 and 11-14 are considered as allowable subject matter.

15. Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee.

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### **III. DIRECTION OF FUTURE CORRESPONDENCES**

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Yaima Campos whose telephone number is (571)272-1232. The examiner can normally be reached on Monday to Friday 8:30 AM to 5:00 PM.

#### **IMPORTANT NOTE**

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sanjiv Shah can be reached on (571) 272-4098. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

January 25, 2007



Yaima Campos  
Examiner  
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